

MASSACHUSETTS PLOUGHMAN



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MASSACHUSETTS PLOUGHMAN

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Correspondence from particular farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, as the writer may wish.

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AGRICULTURAL.

Pinch the lima beans back when the vine reaches the top of the pole and the yield will be increased.

Sage brings a good price for the labor involved. A little of it can be sold in almost any neighborhood.

SWEET corn is generally marketed in barrels which have holes in them to prevent the contents from heating.

BETTER not cultivate field beans when the vines are wet, lest the mud spatter on the pods and cause discoloration and rust.

If the potato bugs are not watched they will make trouble for the tomatoes and egg plants as well as for the potatoes.

For the fall crop of lettuce, seeds should be planted about the first of July and transplanted as soon as large enough. Summer lettuce should be watered to make good plants.

If bugs appear on the melons or squashes sprinkle on soot or very fine wood ashes in the morning when the dew is on the vines. A little lime mixed with the soot will help.

If the seedling of rutabagas fail run the harrow over the patch and sow to fat turnips. If the land is rich enough the white egg turnip will grow to fair size and in many markets will sell as well as rutabagas.

For harvesting early potatoes on a small scale, nothing is better than a six-tined hoe. For a larger field if a little waste is not an item, the double mold-board plow is good. Use a machine potato digger if possible, however.

EARLY peas should be cleaned out at once and followed by celery, turnips, barley or any good second crop. If too weedy the ground can be cleaned by driving over with a cultivator which will scrape off the weeds and vines and drag them in small heaps.

For fall feed, a good sowing is three bushels of barley and one of rye to the acre. Sow as early this month as possible. Barley will stand a little frost, and if the land is rich will make a good forage crop this fall. The rye will live over winter and make good feed in the spring.

The ground around the tomatoes should be kept free from weeds until the plants have begun to spread and throw up shoots from the roots. Even if the land is cleaned until then the weeds will come through the plants the last end of the season and give some trouble. Where only a few tomatoes are grown it will pay to put straw under the plants to keep them from the dirt, or tie the plants to stakes.

BUCKWHEAT not sown until as late as the middle of July often brings the better crop. It a very quick growing crop and does not begin to set grain much until the nights are cool.

To get string beans in succession plant every two weeks up to August 1st. Peas can also be grown in the fall, but the crop will not be so large as spring sown peas, and they will mellow if the weather is not fairly cool.

Fish or fish waste may be applied directly to the soil before planting by plowing and harrowing in. A piece of light, moist soil fertilized with fish and sown down to grass will produce a wonderful crop. If the fish is first composted with loam and muck it will be less offensive to use.

AFTER danger from bugs is passed the pickling cucumbers should be thinned to five plants. Pickling begins as soon as the first cucumber is two or three inches in length. If any specimens are overlooked and allowed to get too large, feed them to the hogs. To let them go to seed, will lessen the crop.

MORE pains should be taken to save manure in summer. If cows are tied up at night and absorbents used, much waste is prevented. The barnyard should be cleaned once in a while to prevent washing by surface showers. Insects waste a good deal. If the hogs have access to the manure heap, and are given plenty of green weeds and rubbish, they will increase the size and condition of the heap.

THE late cabbages should all have been set before this time and frequent cultivation should be in order. There is nothing like hoeing to make fast, firm growth. If any of the plants fail to take hold well, hoe in a little phosphate, nitrate of soda, or fine hen manure. If cabbage lice trouble, sprinkle with slaked lime. Fresh insect powder will kill both lice and cabbage worms. Paris green is unsafe except for small plants.

Value of Drained Soil.

A field of twenty acres which previously yielded only twenty-five bushels of corn per acre, was tile-drained at a cost of \$10 per acre, after which the yield went up to sixty bushels per acre. The extra thirty bushels, at only thirty cents a bushel paid for the entire cost of draining from the first year's crop.

Drainage and Wells.

During hot weather attention should be given to the condition of the sink drain, which will become offensive and dangerous if neglected too long. When the smell is noticed for quite a distance from the drain something is wrong. If the drainage empties on the surface it should fall on sod land, and the place of outlet be changed often. The sewage can be conducted quite a distance beyond the trough by trenches from which it will soak into the soil. Care must be taken not to let it contaminate the well by soaking too long in one place. Besides typhoid fever germs, other germs which cause less serious troubles often find their way into well water through carelessness in regard to the surroundings.

A Late Crop that Pays.

Celery is not only a profitable crop, but it has the advantage of making most of its growth late in the season, so that if set after most any early vegetable it will make a good yield. July is plenty early enough to transplant for the late celery crop.

A good plan is to set the plants five inches apart in rows three and one-half inches apart. The gardeners around Boston prefer rather heavy, moist land for the main crop of celery. The soil of some of the best celery fields is black and almost mucky; the ground is made very rich with stable manure. The soil is cultivated as for any other crop. Keep the surface soft and fine and kill weeds. In September, or when the

plants are large, gradually earth them up, in order to bleach the stalks, or the bleaching may be done by placing boards on edge each side of the rows close against the plants. Before the ground freezes the plants can be taken up and stored in the cellar or in a pit of a hot bed, which should be covered over with straw and boards. These suggestions are not intended for gardeners, but for farmers who wish to raise a small supply for home use and local market. Any farmer can succeed with celery on a small scale.

The Men Who are Improving the Dairy Business.

They are not the men who are dolefully declaring that "Dairying Don't Pay." They are not the men to follow blindly the stereotyped methods of twenty-five or fifty years ago. They are, on the contrary, the men who are day by day studying the cow, the process of separating the cream from the milk, and the churn. They are the men who do not know it all, but those who are perfectly sure that they do not, but who are willing to work hard for the knowledge which will enable them to push ahead toward better things.

"I tell you," said one of these last named men to me the other day, "the farther I go in this business, the less sure I am that I know it all. Why, there is no end to the study a man may profitably put upon it."

This man was one of the recognized authorities upon dairying in the part of the country in which he lives. Upon his table you may find the leading farm journals of the country. In his barn all is system and every cow is known as well as if she were a member of the family. Still, he says, "I have much to learn about dairying."

There is hope for such a man, but none for the person who does not care to do anything but milk his cows year after year without knowing whether they pay for their board or not. Passing through a community devoted to dairying, it is not hard to pick out the farm occupied by men who are at work with their brains as well as with their hands. Their buildings are warm and well kept. No great heaps of manure lie rotting in the sunshine against the side of the barn. Their stables are well lighted, clean and comfortable. Their dairy utensils are sweet and free from any kind of impurity. Their farms are thrifty and their fences trim and in proper shape.

How does this come about if "farming does not pay?" What is the secret of their success, looking at it from the standpoint of the man who will not study to keep up with his profession? This is, indeed, a hard question for me to answer, and I must refer it to some of the skeptics which in all sections abound. For myself, I prefer to believe that these dairymen succeed because they have won success. They are working toward the top.

And I further believe that the time will come when everybody must fall in with the procession or drop from the ranks altogether. There is no room in this army for stragglers. It is the men in the front rank who will win the battle. Where are you in this onward movement, kind friend?

E. L. VINCENT.

Broome Co., New York.

Practical Farmers.

There are certain farmers who pride themselves on being "practical" farmers. They don't monkey with theories, and don't need any agricultural literature to tell them about the theories or the practice either. We have all seen these farmers, and likewise have seen a comparatively green man—who didn't know it all and realized it—go out and beat them at their own game. The most practical farmer is one who carries on his business so as to realize the greatest benefit from it without sacrificing his capital. No matter what he knows or does not know if he is successful at his work he is a practical man so far as that work is concerned.—National Stockman.

The Forestry Question.

"Whenever the wonderful timber capacity of such sections (New England) is fully appreciated, and when the owners learn how to grow and care for the choicer varieties of timber trees, the forest area will be considered anything but waste land."—Massachusetts Ploughman, July 16.

Never were truer words written than the above. Of all the things I see in the management or mismanagement of lands and neglect of opportunities—God given opportunities—none surprise me more than the neglect of young forests and of idle lands suitable for the growing of timber. More than two hundred thousand acres of lands lie idle and bare in famous Massachusetts, with its Arnold Arboretum and Bussey Institute. Instead of growing timber upon these lands she imports largely from Maine, New Hampshire, Vermont, Canada and other places, and lets these acres lie idle.

Since the Hon. Charles Francis Adams has joined in the doleful statements of Doctor Oswood as to the effects of felling too much of the forests in foreign countries, and in earnestly warning our country not to make any such fatal mistake, I would like to ask the former named gentleman to give his great influence (1) to the foresting of the waste lands in his state, to the proper timber trees, (2) to the proper care of young forests, such as thinning, pruning and giving preference to the most valuable kinds of trees, and (3) to having the full grown mature trees utilized and their places supplied with young trees instead of permitting the old to occupy the ground a half century or more in rotting down.

In New Hampshire it has been estimated that we cut about one hundred feet board measure per acre annually from our forests, and that at this rate of cutting our timber will soon be exhausted. I believe that I can demonstrate to any man conversant with standing timber and its measurements that from five hundred to one thousand feet board measure, of white pine timber can be yearly grown upon an acre of very poor land. At this slower rate of growth, the one million four thousand acres of forest land in Massachusetts would yearly grow more than five hundred million feet of lumber, while the amount yearly cut is not over one hundred and seventy-five million feet. It is safe to say that the one million four thousand acres of forest in Massachusetts and its two hundred and twenty-six thousand acres of idle waste land would, properly forested, yearly grow five hundred million feet, board measure, of lumber perpetually. I presume that this is some five fold the amount now grown annually.

I believe that there have been more acres of forest felled in America within the last two centuries than in any other division of the earth, and perhaps more acres planted to trees in the United States within the last twenty-five years than in any other country, yet I have failed to find that the felling or setting of these trees have materially affected the rainfall. I am not sure that the freshets have increased in number or volume, or that the streams have been lower in summer on account of this felling of forests in our country. My own impressions are that the more plant growth there is yearly produced in any river valley the less amount of water will be run off in that stream, because a greater amount is used up by the plants.

How much water does it take to grow a cord of wood, seventy-five bushels of corn, three hundred bushels of potatoes or a ton of hay?

Be the facts as they may regarding the effects of forests upon rainfall and the flow of streams, scientific forestry, generally practiced, will certainly furnish a vastly increased amount of timber, and whatever improvement in climatic conditions which depend upon the forests.

J. D. LYMAN.

Exeter, N. H., July 18, 1898.

R. M. Jaynes, a prize buttermaker of Vermont, says: "Sour cream just enough to get the right flavor. I can not tell you how to do it; it takes experience and a lot of it, too."

The Round-Headed Apple-Tree Borer.

The round-headed apple-tree borer is next after the codling moth, the worst enemy to apple culture in America, says a bulletin of the Department of Agriculture.

The first intimation that the grower may have of the presence of this borer is in their retarded growth and the sawdust like castings, consisting of excrementitious matter and gnawings of woody fibre, which the larvae extrude from openings into their burrows. This manifestation is usually accompanied by more or less evident discoloration of the bark, and, in early spring, particularly, slight exudations of sap.

The parent of this borer is a beautiful beetle, measuring from three-fourths to nearly an inch in length, the male being perceptibly narrower than the female. The antennae are long, stout, and many-jointed, being somewhat shorter than the body of the insect itself. These organs and the legs are gray, the under surface of the body and the head are silvery white, and the upper surface is light yellowish brown with two longitudinal white stripes extending through the thorax and elytra or wing covers to the tip.

The larva when mature measures from three-fourths to a little over an inch in length. It is fleshy and somewhat grub like in appearance, cylindrical in form, and light yellow in color. The head is darker, particularly about the mandibles, which are nearly black. The first thoracic segment is large and broad and bears on its summit numerous small tubercles, placed closely together. The remaining joints of the body are narrower, the constrictions between them being deep and conspicuous. It is destitute of organs of locomotion.

The pupa is nearly as long as the adult insect, which it resembles in a superficial manner, the head being bent down toward the breast, and the legs and long antennae folded upon the ventral surface. Its color is similar to that of the larva.

This species is native to this country and present in injurious numbers in practically every State of the apple-growing region east of the Rocky Mountains. It is in the older States, particularly New England and New York, where orchards have been long established, that injuries are most pronounced.

FOOD PLANTS AND NATURE OF INFESTATION.

This borer is particularly limited in its food supply to the apple and kindred woody plants. It is most injurious to quince and apple, and somewhat less troublesome to pear. It also infests crab apple and thorns of different species, choke-berry and June-berry, in short practically all except one or two kinds of trees and shrubs belonging to the genera now included in the restricted family of Pomaceae. The wild plants of its natural food and certain varieties of its insect, are for some reason not so susceptible to injury by it as our cultivated trees.

This species inhabits more particularly the base of the trunk of trees, often being found below the surface of the earth, especially in young nursery stock. It is to such trees that it is most injurious as it soon works around the tree, separating the wood from the bark, interfering with the flow of sap and producing the effect of girdling, a result which is very apt to be produced even when no more than two or three larvae occur upon the same tree. Very frequently four or five larvae dwell together in a single small tree and in a short time injure it entirely beyond recovery.

In older trees larvae occur somewhat higher up the trunk, in exceptional cases at a distance of several feet from the base or even, still more rarely, in the lower limbs; but as a rule they are seldom found except within a foot or two of the base. Trees of all sizes are frequently killed or so weakened that they are unable to mature a full crop of fruit.

The experience of many years shows that injury follows where grasses, weeds

or other rank vegetable growth are permitted to accumulate about the trunks of the trees, since the beetle, like all nocturnal insects, naturally seeks concealment, and the conditions thus afforded are most favorable for its attack on cultivated plants.

Concealed as this insect is during its three years of existence in its preparatory stages it is nevertheless a prey to natural enemies which seek and devour it in its haunts under the bark. Of this number are woodpeckers and hymenopterous parasites.

METHODS OF CONTROL.

After borers have once entered a tree there is no better remedy known than to cut them out with a knife or other sharp instrument. In the treatment of this insect an ounce of prevention is worth several pounds of cure. Cutting the borers out, unless practiced with the greatest care, is apt to result in injury and it is far better to prevent the parent insects from depositing their eggs upon the tree. This is not difficult of accomplishment, as oviposition is practically confined to two months in a single locality, usually during June and July. The best preventives are impenetrable substances placed about the trunk and various washes of a repellent nature.

Cutting out by hand.—Little has been gained in the line of direct remedies for this borer until very recent years. The early writers had nothing better to advise than cutting out the larva, either with a knife or gouge, or killing them by the insertion of a wire into their burrows. These remedies were in use early in the present century and are still the ones most often practiced. It is no uncommon thing to find four or more larva in a single small trunk and the cutting out of all of them, if not practiced with the greatest caution, is apt to result in the girdling of a tree, if, indeed, this has not already been accomplished by the combined attack of the borers themselves.

It would seem superfluous to add that it is best to cut the borers out as soon as detected. Their presence may be known by a little experience, some persons, the writer is informed, being so expert in detecting their exact location as to be able to kill them with a knife thrust or by the puncture of an awl or other sharp instrument. The fruit-grower should institute a practice of inspection that the borers may be removed as often as found.

To assist the tree to recuperate after it has been girdled a bridge or two should be made by splitting a piece of apple twig (say, of an inch or two in thickness,) cutting it diagonally on the inside, and applying to the surface at the base of the tree. It should then be tied on and grafted wax applied to each end, after which a fertilizer, preferably fresh cow manure, should be applied and the whole banked over with earth. It is also well to keep the tree watered for a few weeks after treatment whenever this is practicable without too great inconvenience.

Mechanical preventives.—This is one of the borers that can readily be controlled by different sorts of mechanical barriers placed about the base of the tree. For this a few thicknesses of newspaper wrapped rather loosely about the trunk and extending about two feet from the base are all that is necessary. This covering should be tied, by preference with cord, which will readily yield or break with the natural expansion of the tree in its growth, and also be tightly fastened at the top and bottom and hilled up with earth so that the beetles can not obtain access to the tree from below. From the top of this covering upward it is best to use some deterrent alkaline or carbolic wash. Instead of newspapers, wire gauze or mosquito netting may be used, and should be put in place, so as to loosely encircle the tree, that the beetles may be unable to successfully deposit their eggs between its meshes and the growth of the tree may not be hindered. Both have been successfully employed for a long period of years, and there is abundant testimony to their value. If the netting or paper be put in place early in May, it will not only prevent the beetles from ovipositing during the next two months but will also keep the insects which might be present in the trunk from issuing and they

will die in their burrows without being able to lay fertilized eggs. The paper wrapping must be removed each season, but the wire netting will last for several years. It is safe to remove either, ordinarily, after the first of September.

Hydraulic cement mixed with skim milk, recently advised by Dr. J. B. Smith as a remedy for a peach-tree borer, should prove equally effective against this apple-tree borer. It could be applied with less trouble than paper bands.

Protective washes.—Any one of several washes in general use against boring insects may be used as deterrents. A good alkaline wash is prepared of soft soap reduced to the consistency of thick paint by the addition of caustic potash or washing soda in solution. A good fish-oil, or whale-oil, soap or common soft soap are often used, and in some cases any one of these is sufficient to deter the insects from depositing their eggs. The alkaline wash may be carbolic acid, by the addition of crude carbolic acid, at the rate of one pint to every ten gallons of the wash. Such a wash, it should be borne in mind, not only affords protection against this and other borers, but against scale and fungous diseases at these points, and is, moreover, of positive benefit to the tree. Caustic potash fish-oil soaps are among the best for insecticides.

Whatever wash is used should be applied thoroughly, and in localities where apple-tree borers are unusually troublesome the larger branches should also be covered as far as possible. The wash may be best applied with a white-wash brush and should be renewed at intervals of two to four weeks, as found necessary, the first application being made before the appearance of the insects in May or June and again during July.

It is well to scrape old trees to remove the dead bark scales, care being taken not to cause any abrasion which would injure them. Scraping is best done some time before the application of the wash that the wounds that might be made shall have opportunity to heal before the appearance of the beetles.

Destroying the adult insects.—The mature beetles are shy, and so seldom seen on this account, that it is doubtful if any method of destroying them is feasible. They are attracted to lights at night to some extent, and some meet their end in this way. Very early in the morning, immediately after day break, the beetles may be found upon the trees, if sought for in their season, and may then be beaten off into an inverted umbrella by striking the branches with a stout stick.

Kerosene as a remedy.—A great variety of substances have been recommended to kill the borers in trees, but up to the present time only a few have given satisfaction. For the benefit of those who have not had experience with this borer, it may be necessary to state that it is of no avail whatever to inject kerosene or any other insecticide into the round holes made by the beetles in their escape from the trees. A correspondent of this Division, Mr. T. B. Ashton, who has had many years' experience with this borer, states that there is no better way of effectually putting a stop to the depredations of this and similar borers than in the use of kerosene applied freely wherever the castings of the larvae are to be seen protruding through the bark. The kerosene is absorbed by the castings and, carried by capillary attraction, permeates the entire burrow where it comes in contact with the lava, which soon succumbs. The amount of kerosene which is necessary to use is so small that it does not endanger the health of the tree.

Clean culture methods.—Finally, clean culture, the best preventive for insect injury of whatever kind, should not be neglected. The nursery should not be started in new localities where crabs, thorns, June-berry, and other wild food plants of this species grow in great profusion nor in the vicinity of neglected orchards, nor should rank growths of weeds, grasses, bushes, and briars be permitted to accumulate about the trunks of trees. When a tree is seen to be injured beyond recovery it should be taken out and destroyed by burning before the following spring, that the lava which it contains may not have an opportunity to develop and reinfest healthy growth.

POULTRY.

Run-Out Poultry Farms.

In all places where hens have been kept a good many years in large numbers a good deal of the natural food supply has been picked out by successive generations of fowls. The best of the grass and clover has been eaten out, the sharp gravel picked up, and some kinds of worms and insects are quite scarce.

Such failures in the natural supply must be made good artificially or trouble will result. The chances are, too, that old and crowded poultry premises are more or less affected with germs of disease, and they should be cleaned and renovated and the ground planted, one place at a time.

Why They Need Air.

The summer hen-house should be as open and airy as possible without giving undue advantage to hen thieves and pests.

An ordinary hen-house is always close and stuffy in hot weather, because the hens instead of sweating like human beings or horses show the effects of the heat in breathing much faster than ordinary.

In proportion to their size they use up much more air than a human being, and a house with a poor circulation of air is always uncomfortable and unhealthy for them this season.

Farming Out Eggs.

The practice is becoming very common among noted poultry fanciers, of engaging farmers to raise their fowls, furnishing the eggs and paying either a stated price per grown chick, or paying a good round price for the best birds, and giving the fowls outright to the farmer to be sold for market poultry.

One famous breeder pays his egg farmers ten cents apiece for every egg taken off their farms for his stock, also a good price for the grown chickens.

The profits of this kind of chicken raising are much greater than ordinary. Some of our readers may be able to make arrangements of this kind with the nearest large breeder.

To obtain eggs for raising a farmer must be able to convince the fancier of his reliability and also of his skill in hatching and raising a good percent of chicks, and giving them quick, vigorous and healthy growth. Those who do well with the stock are retained year after year, while the careless and unsuccessful ones are dropped.

Making a Silo for Poultry.

Farmers and poultrymen are partial to green food in winter and some are interested in ensilage. A subscriber requests information on silos.

We will lay down in brief form a few rules which will include the whole subject in a nutshell, as follows:

1. A silo is a barrel, tank, hogshead, pit, box, or anything that will hold green food. They can be bought ready made of any size.

2. The larger the silo the better, and it must be sufficiently strong to resist great pressure.

3. The more pressure on the contents the more perfectly the air is excluded. If pressed as closely as tobacco in boxes, so much the better.

4. Corn, clover, alfalfa, grass, bean tops, pea vines, or anything may be put in the silo, but all materials must be packed in firmly and then weighted.

5. All materials must be as near maturity as possible; that is corn is used when the ears are about beginning to glaze, and clover is cut when in blossom, before the blossoms turn brown. This is because very young plants contain too much water.

6. Everything that goes into the silo must be cut as fine as possible so as to pack well. The material will then be ready for use for poultry in the winter season.

7. The contents will keep for a year or more provided the pressure is sufficient to exclude the air. If the air enters fermentation will result.

8. Cabbage and such watery substances are not suitable for ensilage.

9. A silo should be about 8x8 and eight feet deep, though it may be smaller. A barrel is too small, as the top and sides of the ensilage spoil first.

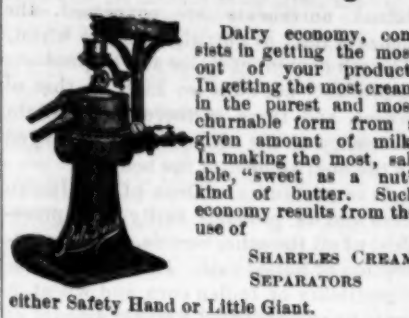
10. To explain how to give pressure suppose that a barrel is used. Have the head of the barrel a trifle smaller than the opening. Pack the contents into the barrel, put on the loose head, and then put heavy stones on the head, the more the better. Keep on filling in the material until the barrel is full, leave the head on and set a heavy stone on it.

11. When using the material always replace the head (or top), and the contents should be so closely packed as to require picking out with some instrument.

12. A silo four feet deep and 4x4 feet will hold more material than will be wanted.

13. It will prove the cheapest food that can be used, will provide a variety,

True Economy--



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Dairy economy, consists in getting the most out of your product. In getting the most cream in the purest and most desirable form from a given amount of milk. In making the most, salable, "sweet as a nut," kind of butter. Such economy results from the use of

either Safety Hand or Little Giant.

P. M. SHARPLES,
West Chester, Pa.

and the material will be succulent and highly relished. We have seen cats eat ensilage made from green corn stalks. They will readily accept the bulky food as an agreeable change from the dry grain.—The Poultry Keeper.

Poultry Notes.

In an egg of 1000 grains, 600 belongs to the white, 300 to the yolk, and 100 to the shell.

Poultry manure, even to the farmer, ought to be worth half the cost of the grain that the fowls get.

If cracked corn is fed to young chicks it should be fine cracked or granulated, not the ordinary kind. It should be given along with plenty of sharp grit.

A little powdered charcoal with the food is good for indigestion. The common symptom of indigestion in fowls is bad breath. Loss of appetite is another sign.

Sometimes fowls will pull feathers in summer if closely confined. Mix powdered aloes with lard and spread around the bare places; they do not like the taste.

Douglas mixture is made with one part sulphur, four parts copperas, adding about a quarter of a pound of the two to about a gallon of water. Put a spoonful of this mixture into the water every day when the fowls seem to need a tonic.

This hot weather is hard on young turkey. If there is not too much moisture, the trouble is probably indigestion caused by sour food or the lack of sharp grit. If the birds that die have enlarged livers, the difficulty is surely indigestion.

Persons who have to give medicine to chickens will find it convenient to remember that a teaspoonful holds one fluid dram, a tablespoonful half a fluid ounce, which is equal to about sixty drops of water. A dose for a six weeks chicken is about the same as for a year old chick.

Fortunate the man who can give his hens unlimited range in summer. His feed bills will be light, and his egg supply will not fail, but just as the farmer who wants to make all the milk he can, finds it profitable to feed grain along with his pasturage, so the modern poultry keeper, who is in it for business, finds that it pays not to omit the regular rations, and to prepare them with some care even in summer with free range.

Pedigree in Strawberries.

A great many are led astray by the misconception of the word "pedigree." What is pedigree? Merely a record, tracing back a line of ancestry, a family descent, an historical record. As applied to strawberries fifty years would cover the time of record, if such a record had been kept, and only lead back to our wild American berry at the head of the line. The writer well remembers the "furor" created by the first decided improvement, i. e., Wilson Albany. There was some little gain in other seedlings at that time, barely enough to encourage experiment, but not enough to justify planting on a large scale.

Foreign varieties were tried and proved unprofitable, only one gained any notoriety, the "Haut Boy," but it was insipid, pale, soft and hollow hearted, although it had size. Even it soon disappeared. What effect these foreigners might have had in pollenizing our natives is unknown, but in all fruits from seed, some of those seed have a tendency toward improvement, in order to adapt a species to environments and conditions. Even changing a so-called species and evolution, a survival of the fittest. Cross breeding of varieties is commonly used to accomplish improvement, but this is only developing tendencies. Hybridizing is sometimes resorted to but being against the laws of nature very little is accomplished except as curiosities or monstrosities. Therefore pedigree means a line of ancestry that has shown a constant tendency toward improvement. As all the new varieties can only name their immediate parentage, even under the most careful supervision, pedigree in strawberries amounts to but little. Now, as under the common method of selecting the largest berry for seed, the chances of accidental pollenization, renders ped-

agree, as used in regards to plants, far less.

The law of reproduction is the strongest law of nature in vegetable life, so much so that the parent plant often yields up its own individual life in order to produce and sustain its offspring, particularly so in the strawberry, under certain conditions. A look into its methods reveals two distinct and widely different ways. First, by seed as contained in a pulpy receptacle, known as the berry, composed mostly of water, holding in solution the nutriment necessary to form and perfect the seed. One of the wise provisions of nature is the male and female principles, enabling changes of habit suited to conditions. A study of these things leads to improvements of varieties; neglect leads to reverse. A mixture of the two principles shown in plant life by stamens and pistils, enables each to perform its missions, accomplished by the pollen being deposited on the pistils and resulting in seed that contain embryo plants, embodying characteristic traits of both parents. Here is the law of heredity made manifest in a modified form; not as strongly perhaps as in the strawberry. Second, means of reproduction, namely the runner method. A variety originally good, or bad, will always reproduce itself true to its characteristics, by means of the runners, like producing like; except as conditions are detrimental to its powers of assimilation of nutriment, and its resistance to exhaustion. Here comes in the command of infinity, to "dress and keep the garden." "Be fruitful and multiply," is obeyed far more in vegetable life than amongst mankind. Untoward conditions such as poverty of land, want of water, (to dissolve nutriment), cold, (rendering the plant dormant), extreme heat, (destroying leaf tissues), cultivation (?) (destroying the natural root system), changing natural methods of growth and climatic conditions; nutriment (manures in an improper state) and ways of applying same, unfavorable environments, etc., all have a powerful effect in producing exhaustion by curtailing the powers of assimilation, thus showing the importance of understanding the details of life processes, and the condition conducive to successful results. To understand the merits of selection, a view of the method of reproduction by plant growth is useful. Start with the incipient layer plant on the runner; it draws its first sustenance from the parent plant by means of the wiry extension called runners, these secure dispersion, as well as a means of transference of the characteristic traits of the seedling, otherwise variety. These traits are transferred by some subtle process savoring of infinite wisdom, and are unknown. All the tendencies are passed over through the runner literally a Phoenix rising from its own ashes.

When the "youngster" is strong enough, or rather the body is ripened enough to start life on its own account the main roots are set forth by the effect of moisture, heat and "stored-up" vitality. We know that vitality is stored and ripened because a cutting taken at this time is rootless, having but the rudimentary form, yet it will develop itself without farther aid from the parental stock, giving evidence that it contains within its own body all the characteristics and powers of the variety ready to be developed by conditions. Man's province is merely to furnish the conditions, otherwise "dress and keep" intelligently. After sending the main roots downward and as they ripen or become fitted by structural development, hairs or feeding organs are formed much in the same manner as the main roots are, while from the crown more foliage is developing, (note the incipient layer plant, showing a leaf before the body is distinguishable) to perfect the sap by exposing it to the effects of sunlight and heat, and contact with gases of the atmosphere.

As the demand for increased amount of nutriment ensues, the roots extend search of it, by branching out the so-called "fibres," and increasing the number of "hairs;" as the mechanical conditions exist, so will be the ease of root preparation. The roots exhibit an instinct that borders closely on human intelligence. They always turn toward the supply of nutriment, i. e., vegetable and mineral constituents in solution. As water is the "vehicle," they turn toward it invariably; if the supply is deep, the root trend is downward; if shallow and above, the trend is upward, which illustrates the advisability of deep soils, thus rendering the effect of drought abortive. It is evident that if the penetrating points of the working roots are destroyed by any means whatsoever, the well-being of the plant must seriously suffer, because of the inability to perform their functions; only the hairs are absorbents, other portions acting merely as conduits, and

in the fall of 1896 I arranged, as an experiment only, a small place to winter bees in. The room is about ten feet long, and six wide, and five high. There is room for about thirty hives of bees if the winter-cases are removed. The wall on the west side is about six inches thick. The other sides are double, the inner wall being only heavy building-paper, while the outside is boarded and shingled. There is a double roof to the building and ventilation opening to the south between the two roofs; not much ventilation at the bottom. Floor is the plain earth. The last two years the bees were put in about the middle of December; every colony came out both years in fine condition though the first year there was no ventilation at the top of the building and a few combs moulded a little. This year the bees were removed on the 9th day of March, and six days following were warm and summer-like. I judged that there were about two quarts of dead bees in all, and every comb as bright and clean as in the fall. Some of the colonies commenced to carry a pollen inside of twenty-four hours—a fact attesting the perfect way the bees had wintered.

Now comes the point and the theory I wish to emphasize upon. There was no such thing as an even temperature in the bee house during the two winters. I did not want such a thing to be so. I wanted the temperature to vary inside as it did outside, only not to such extremes. When it was at zero outside, I found it at twenty degrees inside, and that was just as I desired

serving as anchors to hold the plant in position.

There seems to be three distinct periods of stages of life in strawberry growth. 1st. Plant growth, when all the energies are directed to building up structural requirements. 2d. The production of seed to adapt the species to conditions and environments. 3d. Reproduction of its own individuality or variety by runners. But the storing-up of vitality is continued from start to finish. Then its own roots die off as well as the foliage, leaving but the body in a state of comparative rest, although a circulation of sap is maintained by means of a couple of leaves from the centre of the crown. When these things are learned in connection with its epicurean habits, the growing of "Big Berries" and "Big Yields" becomes as easy as growing weeds.—Henry Snyder in Strawberry Culturist.

APIARY.

Introducing Unfertile Queens.

I find that when colonies have been queenless three or more days, they are ready to accept most any kind of a queen. Yet it is always more difficult to introduce a virgin queen than it is a fertile queen, especially if the former queen is more than three days old.

Before I introduce a queen, I find it can be more successful if the bees are first fumigated with tobacco. A large quantity of smoke need not be used. Proceed in the following way to introduce a virgin queen: When the bees are all in for the night, close the entrance with a plantain leaf and introduce the smoke through the feed-hole at the top, and immediately let the queen in. I shake the queen out of the cage into the grass, and before she can fly, catch her and throw her into the hive as above stated, through the same hole the smoke is introduced into. Of course the hive is kept closed till the next morning, when the bees will push the leaf from the entrance, and in the course of a few days the queen will be found laying. All work of this kind should be done after sunset so as to avoid robbing. As most beekeepers understand how to introduce fertile queens, I will not repeat the method here.—Henry Alley.

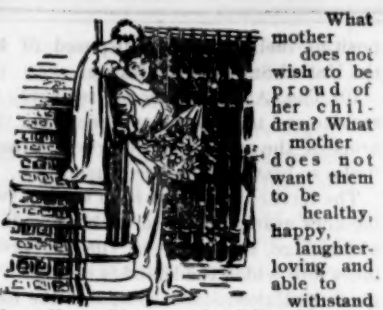
About Wintering Bees.

I have never been in favor of wintering bees on the "hot-bed" plan; that is, I have not believed in keeping bees through the winter in a place where the temperature is continuously maintained at a high point, say from 40 to 50 degrees. That is too much on the "hot-bed" plan for me. I believe in placing bees in winter quarters in the fall as late as possible, or certainly not until winter has set in. Here that time is about the middle of December. On the other hand, I want to take them out on the approach of spring, and that with us is about the 20th of March.

My objection to wintering bees in a high temperature is that they cannot safely be put on the summer stands in the spring until the temperature averages as high outside as that in which the bees were wintered, or kept in from four to five months. The change from a warm to a cold place works just the same on bees as it does on tender vegetables grown under glass. Remove the glass and down go the plants. Place the bees on the summer stand too early, and down go the bees—spring dwindling. I have tested both the vegetable and the bee experiment, and know what I am talking about.

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What mother does not wish to be proud of her child? What mother does not want them to be healthy, happy, laughing, loving and able to withstand the ordinary illnesses of childhood? Any woman may insure the health of her children who will take proper care of her health in a womanly way. The health of her children depends almost entirely upon her general health, and particularly upon the health and strength of the delicate and important organs that bear the burdens of maternity. A woman has no right to disregard her own health, comfort, ease and happiness, she certainly has less right to condemn her children to a life of suffering or an early death. That is what she does if she neglects the health of her special womanly organism. Dr. Pierce's Favorite Prescription is an unfailing remedy for all disorders of this description. It strengthens and invigorates the sensitive organs concerned, and is the best preparation for the trials and dangers of maternity. It insures the well being of the mother and the health of the child. Its use is a guarantee of a bountiful supply of nourishment for the little new-comer. Many women who once bore children only to speedily lose them are now mothers of healthy, robust children as the result of the use of this medicine.

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Nor did the temperature go above forty-five degrees through the winter. There will be no spring-dwindling here, and I can show as fine a lot of bees as can be found anywhere in Massachusetts.

If the winter problem had not played out, I should expect some of the "hot-bed" bees to pitch into me for expressing sentiment like the above. But facts are facts, and the laugh is on my side, as my theory and experiments have proved a complete success.—Henry Alley in Gleanings.

Feeding Grain to Cows on Pasture.

Prof. Henry, in his book upon "Feeds and Feeding," relates the result of an experiment made under the direction of the Cornell station to ascertain the value of feeding cows with grain while at pasture.

"Sixteen cows belonging to a New York dairy farmer, which had been lightly fed during the winter, were divided into two lots of eight each. The test began May 23, and one lot was fed four quarts daily of a mixture of two parts cotton-seed meal by weight. The other lot had no grain, and all out in the same pasture.

August 10 the pasture became poor, and both lots were fed with green fodder corn until Sept. 9, when green millet was substituted for the corn, and this was changed to meadow grass Oct. 1, and followed Oct. 13 with a generous quantity of pum. kins. Thus it will be seen that the lot without grain was well supplied with green fodder, much better than the cows of the average farmer.

The test lasted twenty-two weeks, and in that time the first lot had consumed 5,200 pounds more of grain and had given 4,931 pounds more milk than the other lot, or nearly a pound of milk for a pound of grain. They had also gained fifty-three pounds in weight per cow more than did those without grain, or 166 pounds as compared to 113 pounds. The quality of the milk contained about the same.

The next year there were six cows out of each lot remaining in the herd, and they were put in pasture without grain, and a record of their milk kept for six months. The average per cow for those fed grain the previous year, 3,440 pounds of milk, against 2,960 pounds per cow for the other lot, a gain of 480 pounds per cow, attributed entirely to the feed of the year previous. Prof. Roberts of the Cornell station said of this test, "It was plainly evident that the grain-fed two-year-olds and three-year-olds developed into better animals than their stable mates which had no grain."

Other experiments made where the cows were in what is called a luxuriant pasture, showed but little gain by grain feeding, for the grain as shown in the test did not repay the cost of the grain fed. Two-point test made upon a poor or scanty pasture would have shown even better results than it did in the test reported. There is also a gain in the improved quality of the manure heap from grain-fed stock, amounting according to our experiment station, to form one-half to one-third the cost of the grain in value."

In hot weather it is of highest utility to supply all grain feed in a light, bulky medium, so that it may be quickly and easily acted upon by the digestive fluids and assimilation facilitated rather than hindered. To this end considerable bran should always be mixed with the heavier and more concentrated feeds of cotton-seed meal, corn meal, etc. It is well to have at least two-thirds of the bulk of the grain ration to consist of bran. Bran is exceedingly light food and an admirable vehicle to convey other food to the stomach and avoid the evils of indigestion.—Practical Dairyman.

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THE HOUSEHOLD.

MRS. RED SQUIRREL.

MARIAN DOUGLAS.

Mrs. Red Squirrel sat in the top of a tree; "I believe in the habit of saving," said she; "if it were not for that, in the cold winter weather I should starve, and my young ones, I know, altogether; But I'm teaching my children to run and lay up Every acorn as soon as it drops from its cup, And to get out the corn from the shocks in the field, There's a nice hollow tree where I keep it concealed."

We have laid up some wheat and some barley and rye, And some very nice pumpkin seeds I have put by; Best of all, we have gathered in all that we could Of beechnuts and butternuts grown in the wood; For cold days and hard times winter surely will bring, And a habit of saving's an excellent thing.

"But my children (you know how young squirrels like play), 'We have plenty, great plenty, already,' they'll say, 'We are tired of bringing in food for our store; Let us all have a frolic at a gather no more!' But I tell them it's pleasant when winter is rough, If we feel both to use and to give we've enough; And they'll find ere the butternuts bloom in the spring That a habit of saving's an excellent thing."

THE BURNT BUCKET.

"O, dear!" cried Naomi.
"O, dear!" echoed Ruth, and two suddenly-miserable little girls stood looking at each other. What could be the matter? Something pretty bad;—the new pine milk bucket was half burned up.

"What shall we do, Nomy?" asked Ruth of her sister who was older than she.
"We'll have to go right off and tell mammy."

Don't think this happened lately, or when pine buckets were plenty and money easy to get. It took place years ago, when Ohio, as a state, was barely in her teens.

Cousin Ezra Mead, just out from Vermont, was over at Uncle Daniel's, and Mammy had gone over there, to enjoy the rare treat of hearing all the news from the dear old home.

"Take care of things, girls; do your work first, and then play," had been her goodby to her little daughters, as she left them.

"Deed we will, Mammy," they answered heartily as they helped her off, with their little brother and the baby, glad because she was going to have a good time.

Not a cent either did they care for being left alone, and no wonder, for not often did they have time for such a play as the one they had in prospect that day.

Without waiting for the last possible glimpse of their mother through the trees, Naomi, taking the lead, said, "Now, Ruth, if you'll sweep I'll do the out-door work."

So she hurried off and drove the cow out of the calf-pen, without losing an instant in trying to decide which of Bossey's ears was the prettiest, the white or the red one. Next, she pounded up some corn and fed the goslings, without thinking once that time, how much their red feet looked like the morocco in the family baby shoes, so carefully kept and seldom worn.

Almost before Ruth's little arms had finished their task with the heavy splint broom, she was back saying, "If you'll rub the platters, Ruth, I'll scour the milk bucket," and very soon the pewter plates, shining like new tin, stood on a shelf, and turned down on the hearth to dry was the bucket, scrubbed white as a bone.

When they had put two or three sticks of wood on the coals in the big fireplace to keep the fire from going out, because, if it did, there was not in the world, then, such a thing as a match to start another with, and they knew the trouble it was to borrow fire—why then what Mammy had meant by "their work" was done.

And then they were free to hurry out to their ready-made play houses at the foot of forest trees, between the thick, high roots that stood open and welcoming like the arms of easy chairs.

Right at hand, too, were their ready-made furnishings, moss for carpets, chips for shelves, acorn cups for dishes, and gourds for dolls. They gathered, and spread out, and put up, and arranged, and dressed, and took down, and re-arranged and re-dressed the dolls and oh, how good it did seem, and what a little while till they got hungry and went in for something to eat.

Then the brightness of their day vanished at the sight of a charred, smoking object on the hearth, in place of the neat, new bucket that they had placed there.

your father, but I'm going to try and keep this from him awhile, he has so much to fret and discourage him. You must see what good children you can be, and how much you can do to help him."

It was the busy springtime, and as Daddy worked early and late, Mammy managed to milk the cow unobserved of him. Almost as many hours as the parents worked did the little girls toil, scaring the crows and squirrels from off the stumpy cornfield, "picking brush," which meant picking it up to burn, or wetting down the ash leach, or keeping up the fire under the great iron kettles where the lye was boiled down into black salts. That commodity made from the ashes of the huge log-heaps that Daddy burned as he cleared off his ground, was the only thing he had to sell that brought him a bit of money.

He was going off to Zanesville with some of it again as soon as the corn was knee high. The evening before he was to go, after the children were in bed, Mammy said, "Father, I've got something to tell you," for she could not bear to have a secret from him when he was going away, so then she told him all about the bucket. This seems now like a small thing to make such an ado over, but then comforts were few and hard to get. With money from the black salts he had bought a pine board forty miles away, and with the help of hickory hoops made the bucket himself, by fire light.

He didn't say much at the close of her little story, but he must have thought some over it during his lonely, long drive.

A week later the big wagon was home again. Eager Naomi and Ruth climbed into it and with many questions helped Daddy unload.

"What's this, Daddy?"
"Precious salt, girls, that must do us six months."

"What's this?"
"Glass, for a window at last."

"And this?"
"Tea for mother, and a tear in his eye, the little package went into her hand."

"And this, Daddy?"
The board they lifted out looked so much like one they'd seen before that they dropped it, blushing guiltily.

"Hand it along," said Daddy; "I thought it was too bad my little girls were so afraid of their unkind father that they could not tell him about the old bucket, and so I got a board for another milk-bucket."

"O Daddy," they cried, "that wasn't all—we hated to have you feel bad!"
"Was that part of it?" said he. And then he lifted them down and for a great rarity gave each of them a kiss, adding, "We won't begrudge the loss of the bucket any longer if we only learn the lesson from it we may. While I must learn to be pleasant and just, you can learn to be careful and true, but mother here don't need to learn anything; she's perfect already!"

And then for a very great rarity, she had a kiss, too!—Christian Advocate.

THE LAND OF ANYHOW.

Beyond the land of What's-the-use, Where's-slipshod Point is now, There used to be when I was young, The land of anyhow.

Don't care was king of all this realm—A cruel king was he! For those who served him with good heart, He treated shamefully!

When boys and girls their task would slight, And cloud poor mother's brow, He'd say: "Don't care! It's good enough! Just do it anyhow!"

For he who would the harvest reap, And pitch his tent a long way From the Land of Anyhow! —B. W. Mason, in Little Men and Women.

"John Ploughman" on "The Sanguine Man."

One of the late Charles H. Spurgeon's most characteristic minor works was done under the heading, John Ploughman's Talk. Half a million copies of it have been sold. A new edition, which has just been put forth in paper cover and cheap form, ought to be widely circulated. The following citation on Hope is a good specimen of "John Ploughman's style":

"The sanguine man's hope pops up in a moment like jack-in-the-box; it works with a spring, and does not go by reason. Whenever this man looks out of the window he sees better times coming, and although it is nearly all in his own eye, and nowhere else, yet to see plain piddings in the moon is a far more cheerful habit than croaking at everything like a two-legged frog. This is the kind of brother to be the road with on a pitch dark night, when it pours with rain, for he carries candles in his eyes and a fieside in his heart."

"Beware of being misled by him, and then you may safely keep his company. His fault is that he counts his chickens before they are hatched, and sells his herrings before they are in the net. All his sparrow's eggs are bound to turn into thrushes, at the least—if not partridges and pheasants. Summer has fully come, for he has seen one swallow. He is sure to make his fortune at his new store, for he had not opened the door five minutes before two of the neighbors crowded in; one of them wanting a loaf of bread on trust, and the other asking change for a shilling. He is certain that the squire means to give him his custom, for he saw him reading the name over the door as he rode past. He does not believe in slips between cups and lips, but makes certainties out of perhappes."

"Well, good soul, though he is a little soft at times, there is much in him to praise, and I like to think of one of his old sayings: 'Never say die till you are dead, and then it's no use, so let it alone.'"

'Tis not the fairest form that holds The mildest, purest soul within.

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By special arrangements with the BAZAR GLOVE-FITTING PATTERN CO., we are able to supply our readers with the *Junior Glove Fitting Pattern* at a very low cost. It is acknowledged by every one that these patterns are the simplest, most economical and most reliable patterns published. Full directions accompany each pattern, and our lady readers have been invariably pleased with them in the past. The coupon below must accompany each order, otherwise the pattern will cost the full price.

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Enclose ten cents to pay expenses.



No. 7428.—Ladies' Guimpe Waist.

The handsome wrap is the velvet wrap, and the shorter it is made the daintier it seems. One of the very newest styles is here shown in black velvet decorated with jeweled applique bands and edged with fine plisse of mousseline de soie. The single stole end is a new feature that may be omitted if not desired, the cape being perfect without it, as shown in the small sketch. The yoke and collar are cut together, being shaped in six sections that fit the neck comfortably, and can either be joined to the top or left partly open, to form tabs through which the platted mousseline falls with a soft, becoming effect. Each section should be interlined with canvas before joining. The cape or pelerine portion is shaped in circular outline and joined to the lower edge of yoke, the stole being joined to the right front section of yoke. A very handsome jeweled buckle decorates the front. Smart capes in this style are worn by both young and middle-aged ladies, the former preferring generally to omit the stole front.

A handsome silk of satin brocade lining adds much to the attractiveness of this dainty top garment, which can also be developed satisfactorily in silk, satin or cloth, or of material to match the gown. Braid in different designs, passementerie, fringe, ruchings or moss trimming, will provide suitable decoration. To make this cape for a lady of medium size and one-quarter yards of material twenty-four inches wide will be required. The pattern, 7339, is cut in three sizes, large, medium and small. With coupon, ten cents.

Go over the garden beds daily, and remove all fading flowers, says Harper's Bazar. This is very necessary if you would keep your plants blooming. If seed is allowed to form the plant will throw all its energies into the development of it, and you will get but few flowers; but if the process of nature is interfered with by preventing the plant from forming seed, it will, as a general thing, make further efforts to perpetuate itself. In thus thwarting its efforts it can be kept flowering indefinitely. Remove all withered flowers from the lower portion of the gladiolus stalks. If they are left clinging there, they soon give an untidy look to the spike. Tie the central stalk of each dahlia to a stout support, or the plant may be broken over by a sudden wind. Give the morning glories stout strings to clamber on; but never attempt to train sweet peas on any support of this kind, for they will stubbornly refuse to make use of it. They like best a support of brush, but they will do very well if trained over wire netting with a coarse mesh. The netting should be at least five feet wide.

If the season is a dry one, water must be supplied to plants in beds. Give it after sundown to avoid the too rapid evaporation which takes place if the application is made while the sun is yet at the soil. Apply it close about the roots of the plants, where it will do the most good. Keep the soil loose and open. This will prevent its crusting over so that water will run off instead of into it. It also enables it to act something like a sponge, and absorb whatever moisture comes in the shape of dew.

If weeds were kept down well during the early part of the season they will not need a great deal of attention now, but the gardener should make it a rule to pull up every one as soon as seen. Never allow a weed to ripen.

Grass clippings from the lawn will be found very effective as mulch about dahlias and other plants requiring a constant moisture at the roots. As soon as it begins to decay dig it into the soil about the plant and let it act as a fertilizer.

Among much wise advice given to the young girl graduate none has a more wholesome suggestion than that made by a photographer, herself a woman, says Harper's Bazar. "New York," she says, "is no place for a woman to experiment. She must come here equipped in her line in order to be successful." It is just the reverse of this proposition which is generally regarded by young women desiring positions and advancement in New York. With

No. 7339.—Ladies' Pelerine Cape, to be Made With or Without Stole.

The guimpe effect is seen on all dressy waists, whether for maid or matron, irrespective of age, and is very generally becoming. The arrangement here shown with the plastron front is especially adapted to stout ladies who so often complain of being slighted by Dame Fashion. Black and white foulard is the material, the yoke plastron and collar being of white silk covered with black spider net lace and the decoration rows of narrow black satin ribbon. A perfectly fitted body lining that closes in centre front is the foundation over which the stylish waist is arranged. The seamless back smooth across the shoulders has fullness at centre back drawn to the centre at the waist line. The neck is shaped in rounded outline to reveal the handsome guimpe with plastron that is permanently attached to the right front and closes at the left shoulder and under front. The wrinkled sleeves are mounted over two seamed linings, pretty pointed epaulettes being

gathered to stand out from the top. The wrists are trimmed to match the epaulettes, neck and fronts. All kinds of summer material will develop stylishly by the mode, the variety of guimpe ornamentation being almost inexhaustible. To make this waist for a lady of medium size will require two yards of material 44 inches wide. The pattern, 7428, is cut in sizes for a 32, 34, 36, 38 and 40 inches bust measure. With coupon, 10 cents.

Shirt waists are now part of every little girl's wardrobe, and certainly they look much better on children than they do on older women, who have the shirt waist fast to an alarming extent, says Harper's Bazar. It is a mistake to have too elaborate shirt waists for children. The prettiest are really very simple, and look best when worn with a ribbon around the throat. A collar is stiff and old.

The prettiest model has a little fullness on the shoulders drawn down into the belt, a yoke at the back, and medium-sized sleeves finished with a narrow cuff to be fastened with link buttons. The front is fastened with little pearl buttons, not studs. These shirts are worn with linen, pique or serge skirts, and the best bet for a girl is a ribbon some dark color to go twice around the waist and tie in front with a bow.

On the transparent summer gowns rows of ribbon, trim the wide and narrow bouffants and stripe the waists cross and lengthwise. Collars, belts and sashes of ribbon, satin and taffeta are absolutely indispensable on gowns of organdie, Swiss, zephyr, etc., says the Dry Goods Economist.

As the dressy cotton gowns will be made up irrespective of the washtub, the ribbon can be applied in many rows without any anticipated trouble. Flounces on thin goods will be decorated with rows of inserting or ribbon, or both, and the graceful sash ends will be half of the beauty of the gown.

Black and white ribbons are now worn, and will continue to be, on gowns of high color; one of mahogany cloth has belt and collar of black and white stripes and vest of white satin; a tea gown of navy-blue cashmere with scarlet front and white lace frills has long ends and rosettes of the magpie combination.

Poplin frocks are trimmed with a belt and rosettes on each side of No. 9 or No. 12 velvet ribbon; cerise on gray, green on beige, black on turquoise and turquoise on dark green.

Elderly ladies wear taffeta ribbon in black, black and white, purple, lavender, etc., as stock collars and a belt outlining a short, pointed basque. They are also wearing silk yokes covered with rows of narrow black satin or velvet ribbon.

All ages between children and the foregoing are using ribbon from three to four inches wide for plain stocks tied in a short bow or sailor's knot in front. Satin, taffeta and moire are all used for these collars in plain and striped designs in black, white, cerise, purple, emerald, scarlet, turquoise and pink.

The long sashes have been written of; the double-faced black satin have been the best sellers in this line, and exquisite French plains for this purpose have been taken by very exclusive houses.

Satin ribbon braiding continues for woolen blouses. Yokes and sleeves of plain taffeta are covered with a braiding or trelis of narrow black satin ribbon; sleeve puffs and blouse of figured or striped taffeta. This is a capital plan for making a waist out of two small remnants.

Crab-Apple and Plum Marmalade.—Plums used in the proportion of one part to three of crab apple, add richness and a finer flavor to crab-apple marmalade. Stem and cut out the blossom end of the apple; stew, closely covered, in a little water, and when soft rub through a sieve. Cut up the plums, cook in a little water (adding the stone) till soft; rub through a sieve and mix with the apple pulp. Heat slowly, and when it commences to boil add heated sugar in the proportion of three-fourths of a pound to every pound of pulp, and cook half an hour or longer, stirring constantly.—Country Gentleman.

Spiced Peas.—Pare evenly, halve and core rather sweet peas that are not over-ripe. Make a syrup of two cups of vinegar, three pounds of sugar, one heaping tablespoonful of finely broken stick-cinnamon, and the same amount of green ginger root (both tied in muslin). This will be enough for four pounds of peas. Cook the latter in the syrup until it can be easily pierced, and keep in fruit jars.—Country Gentleman.

The American Kitchen is responsible for the following recipes.
Current Jelly.—Pick over the currants and wash them in a porcelain or granite kettle with a wooden potato masher. Put them in a flannel bag to drain over night. Do not squeeze them. Measure the juice and boil it five minutes, counting from the time it boils all over. Remove the scum as it forms. Have the same measure of granulated sugar (not the blue-white) in a bowl, and when the juice has boiled five minutes, pour it into the sugar, or remove from the fire and stir the sugar into the juice if more convenient. Stir quickly till the sugar is dissolved, remove the froth, and pour at once into the glasses. Boil in warm water or place a spoon in before filling. Pour in till they will hold no more. Set them in the sun, and the next day cover with paper. Cut soft brown paper into rounds half an inch larger than the tumbler. Dip them into water and flour mixed to the consistency of thick milk. Drain, and spread them on the top, rub them down smoothly, and when dry they will be air-tight. Label with the date and name of the jelly. After

vague ideas as to the abundance of opportunities, and with no ideas at all as to their qualifications to embrace any, they turn by the hundreds to New York, expecting friendly doors to spring open at their approach. They forget that they do not, in many cases, know what it is they intend to ask for when once a willing ear has been lent them. And they have altogether failed to grasp the truth that a specific demand is in itself an opening wedge to success in new ventures. They believe in propitious fortune, in guiding stars, and perhaps in Providence, but they forget that unless there are ships upon the ocean, no winds, though they blow direct from heaven, can carry any one's vessel to port.

The common garden purslane, more commonly known as "pursley," occurs as a weed in almost every garden in the United States, yet rarely does one meet with a person who has ever eaten it, or who knows of its use as a pot herb, says an exchange. The plant is a native of India, has been cultivated from the earliest times, and was such an early accompaniment of civilization as to have a Sanskrit name. It was carried westward to Europe, and has there been in use for centuries as a salad and pot herb. Indeed, several varieties are now known in cultivation. In the United States, however, it is known only as a weed, its principal economic value being supposed to be as a food for hogs, a purpose to which large quantities of it are devoted. Notwithstanding this use, it is treated as a weed, not as a forage plant. As a pot herb, however, it is very palatable, still retaining when cooked, a slight acid taste. It can be heartily recommended to those who have a liking for this kind of vegetable food.

Out of the first few mistakes which one makes in life or in work one learns to be more definite as to aims and objects. And certainly the young woman who makes her first trials away from a metropolis, where the battle is always to the trained, has done most wisely for herself. If she has learned to be more definite even as to general aims, she will have become better equipped than many of her sisters.

Among the lesser ills of the flesh to which all travelers are liable, is a speck or cinder getting into the eye, says *Outing*. To remove it, get some one to take hold of the upper lid and turn it up so that he can look on the inside of the lid. Then, while you make several movements with the eye, first up, then down, to the right side and to the left, have your companion remove the foreign body by means of a swab. This swab is made with a piece of a match or a tooth-pick for the stem, around the end of which is tied or twisted a piece of cotton taken from the corner of a handkerchief or wearing apparel. The cloth should be moistened in cold water. The foreign body in the eye will adhere to the swab, and can be removed without any trouble.

In more serious cases, if an accident occurs in a city or town, the patient can, of course, receive prompt treatment at the hands of a physician. The greatest injury resulting from a broken limb is due to the way that the patient is conveyed to the physician. Bones do not break directly off; they often break in many places, and one bone overlaps the other, sometimes with very sharp points; therefore, pay attention as to how you carry an injured person. If on the road, break off a couple of fence-rails, tear down a sign-board, or anything from which to get a piece of board about four inches wide and two and one-half feet long, for a leg fracture, and put it on the back side of the leg. Then put two or three turns of the bandage around it. The bandage may consist of a bicycle belt, corsets, strips of cloth, or the like. This will answer well enough to convey the patient a considerable distance. For an arm, of course, the board can be smaller, but the same method of strapping is used.

Crab-Apple and Plum Marmalade.—Plums used in the proportion of one part to three of crab apple, add richness and a finer flavor to crab-apple marmalade. Stem and cut out the blossom end of the apple; stew, closely covered, in a little water, and when soft rub through a sieve. Cut up the plums, cook in a little water (adding the stone) till soft; rub through a sieve and mix with the apple pulp. Heat slowly, and when it commences to boil add heated sugar in the proportion of three-fourths of a pound to every pound of pulp, and cook half an hour or longer, stirring constantly.—Country Gentleman.

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the juice has drained from the currants, squeeze them and use the juice thus obtained in the same way. It will be less cake, but answers as well for cake or puddings. Sugar when boiled with the juice, is changed to grape-sugar, which is less sweet than cane-sugar. This explains why jellies and rich preserves often have a strong acid taste. Jelly made in this manner is clear as crystal, and has a delicious flavor. It may be eaten freely without cloying. It will not always be firm enough to keep in shape, but the improved flavor is more important.

Raspberry Trifle.—Steam one cup of rice in three cups of milk till soft. Salt to taste, and let it dry off. Pile lightly on a platter, making a wall or border round the edge. Fill the center with fresh raspberries, piling them higher than the rice. Sprinkle with powdered sugar. Reserve one pint of berries, mash, and strain the juice, sweeten to taste, and mix it with one cup of cream. Pour this gradually over the rice border.

Raspberry Pie.—Cover a pie plate with a thin layer of rich paste. Put on a rim, and fill the centre with bread crusts. Bake in a quick oven, and when done, remove the bread, and fill with raspberries which have been rolled in sugar. Beat the whites of three eggs stiff, add three tablespoonfuls of powdered sugar, spread over the berries, and brown slightly in the oven. Serve cold with cream.

Fruit Cream.—Three oranges, three bananas, one pint strawberries, one-half can apricots, one pint cream, sugar to taste. Take the juice and pulp of the oranges, mash the bananas, hennies and apricots, and rub through a hair or wire sieve. Add the cream and sugar to make it quite sweet. Then freeze as usual.

Current Sherbet.—One pint currant juice, one pint water, one pint sugar, two eggs (whites). Boil the juice, water, and sugar, skim thoroughly, and pour it while hot into the eggs beaten till foamy. Beat it well, and when cool, freeze.

Whipped Cream Dressing.—Chill and whip half a pint of thick cream until stiff. Add gradually three tablespoonfuls of lemon juice, one teaspoonful salt, one saltspoonful each of paprika and black pepper and three tablespoonfuls of grated horse radish.

Heaven lies about us in our infancy.—Wordsworth.

What is learned in the cradle, lasts till the grave.—French Proverb.

A man can never be a true gentleman in manner until he is a true gentleman at heart.—Dickens.

The heart is the workshop in which are forged secret slanders, and all evil speaking. The mouth is only the outer shop or salesroom where all goods that are made within are sold. The tongue is the salesman.—Sel.

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OUR HOMES.

LIFE'S HARMONY.

The tell me that in his old cathedral
All things harsh and loud—
Grating of ponderous doors, shrill tones, the
trampling
And the murmur of the crowd—
All hushed up, softened, harmonized, and
blended
Within the lofty dome.
The echo back in one great wave of music
Sweet as a dream of home.
So all the harsh notes in life's mingled music—
The hurrying and the woe,
The stroke that almost snaps the quivering
heart-strings—
The best that grieves us so—
In heaven's over-arching dome of perfect wis-
dom,
Power, and love, shall be
Gathered and blended in divinely mar-
velous melody.

—M. L. Upton.

THE EXPERIENCES OF A SPY.

Ordeals He Passed Through.

INSTRUMENT BY GEN. GRANT AND CATE-
CHISM BY GEN. KIRBY SMITH.

I was the first sergeant in Co. D. 7th
Pennsylvania, in the spring of 1863. I
was one of the thousands of soldiers un-
der Grant and Sherman fighting our way
northward toward Vicksburg. There
were skirmishes and engagements every
day at that time. Gen. Pemberton
was at Jackson, Miss., fifty miles east
of Vicksburg, with a force of over
20,000 men, and was being daily reinforced.
Grant and his army entered Grand Gulf
May 2, 1863. Gen. Sherman was
ordered with 12,000 men to make a
demonstration against Haines Bluff to
compel the confederates to detach troops
from Pemberton's force.

Gen. Grant planned to face the two
confederate armies in detail and defeat
them before they could unite against
him. He wished to know a lot of facts
about the confederate fortifications in
the gaps of the Red Rock ridge, and the
size of Johnston's reinforcements. Spies
were necessary, and at that time I
was called upon to do spy service.

I had done a little spy work in the
Port Gibson campaign, but this job in
Johnston's camp, Col. Raymond told
me was about the most dangerous that
any spy could undertake. The two
great armies were almost ready to fight
each other any day, and all the camps
were unusually watchful of unknown
drillings. Col. Raymond said he
wanted twenty young men who had
nerve, and who would go into the
enemy's lines, without whimpering or divulging
secrets. He also informed me that several
confederate spies had been recently
labeled at Corinth, and that the enemy
would surely retaliate on federal
spies.

I was given two hours to think the
proposition over. I was left in a room
and not allowed to speak to any of my
comrades.

I confess I almost perspired blood as
I sat there alone that lovely May morn-
ing, and thought over the horrible risk
I was going to take. But I agreed to go.

Col. Raymond told me that Gen.
Grant wished to talk with the men who
were to go as spies. The colonel led us
about half a mile away to a dilapidated
house where Grant made his temporary
headquarters. Gen. Grant left a table
full of maps and drawings, and came to
speak with us in the yard. He ex-
plained that we had been chosen be-
cause of our reputation for coolness,
nerve and daring. He told us that if
any of us had any hesitancy or doubt of
our courage in engaging in the spy
work in a region and at a time when
we would be summarily hanged if
caught, that one should decline the ser-
vice then and there.

That afternoon each of us was in-
structed in the particular information
we were to get, and the respective part
we were to play as a civilian in the
enemy's camp.

I was given the task of observing
some topographical facts and seeing
that artillery Gen. Johnston's army
had. I was instructed to be a de-
stitute. The surgeon on Gen. Grierson's
staff had been the head of a deaf and
dumb school at Cleveland, and he spent
several hours in drilling me as a
dummy.

I was to go over to Jackson with a
steal full of shoe blacking, shaving
soap, paper collars, and no-
tably, apparently earning my liveli-
hood by selling my wares to confederate
soldiers. A pencil and slate were my
mode of communication.

I started out from the Grand Gulf
late on the night of May 5. I knew
that I would be suspected of being a
spy, and that the least indication that
my hearing was at all good would for-
feit my life.

I was within the enemy's lines by
noon the next day. I ate under a cow-
hide while the rain drizzled down.

In the afternoon I was going along a
road near a hamlet known as Griggs-
burg. I heard a troop of cavalry com-
ing down the road behind me. I put
on a blank expression and trudged
along with my black satchel over my
shoulder.

A lieutenant rode up to me and
said:

"Hello here! where are you going?"
I had time to prepare myself for
this test. I started as if at the ap-
pearance of the horse under my eyes,
and looked vacantly up at the cavalry-
man.

He repeated his question. In a se-
cond I had my pocket slate out, and
handed it cautiously to the officer.
The others in the troop laughed and
said:

"Oh, he's a d-n fool dummy."
The lieutenant wrote on my slate,
"Who are you, and where are you go-
ing?"

I wrote that I was Daniel Freeman,
and that I was peddling for a living.
Several of the troops remarked that
it was foolish to waste time on such a
dummy, but I, for I'd be caught any-
how, and the troops galloped away.

I saw a camp of fully 1,000 confeder-
ates down in the valley. I knew that
my presence would be reported at head-
quarters by the cavalrymen, and I
would be folly to go past a camp if I

were really seeking trade. I was
stopped by a sentinel about the camp.
I wrote for him my name and business
on my slate. He growled something
about lunk-head wandering
about in war time, and catching me by
the coat sleeve, led me to the officer of
the guard. The sentinel explained that
I was deaf and dumb, and went away.

The officer had evidently known that
the role of dummy was not uncommon
with up-to-date spies. "Stand over
there a second till I finish this," said he
in the most artful, off-hand, easy
manner.

My knees did move slightly, and I
almost stepped a foot.

But I caught myself while the cold
chills chased up and down my spine at
my almost forgetfulness, and I resolved
not to risk my neck so easily again.

"Your hand is bloody," said he,
turning carelessly to me. I stood like
a post, looking vacantly at him.

Some of the cavalrymen I had seen
on the road came in, and I knew from
the expression on the officer of the
guard's face that I was to be tested for
my deafness. I stood indifferent to my
environment, looking at a picture on
the wall, while I knew that some test
of my hearing was being prepared at my
rear.

Suddenly one of the cavalrymen
drew his sword and shouted: "G—d
damn this Yankee! I've a good mind
to put a bullet in the right ear!"

"Stab the fellow!" cried another.
Fancy how you would feel to hear
such words shouted in your ears by a
great, burly and armed cavalryman in
an enemy's camp. I can't describe my
feelings, but I never blinked. I stood
scrutinizing the print picture on the wall.

I knew that my every muscle and
nerve was being watched by every one
in the apartment. The least twitch or
turn of the head would have betrayed me.

"He's about as dumb as they make
'em," said the officer of the guard, when
it was seen how oblivious I was to all
their tests of my hearing. "Isn't it
strange that such a poor cuss should go
peppering around the lines of warfare?
He'll get over the Yank lines and it'll
go hard with him some of these days."

I was dismissed. I went peddling
about the camp, all the time keeping
my eyes open for topographical and
armament information.

Two days later I was seven miles
farther in the enemy's country. I had
met hundreds of confederate soldiers
on the way, but the fact that I had
passed an outlying camp all right was
an indication that I was a genuine fool
dummy.

I got a mass of information and had
found simple tests of my hearing, or
rather my non-hearing faculty.

I was almost on the verge of nervous
prostration from the strain of ceaseless
precaution I had to exercise, lest I re-
veal my hearing.

I was standing in the door of a
shanty cook-house in a camp, and with-
out a moment's warning down came
about five gallons of cold water over
my head and shoulders. I shudder now
when I think how near I came to caus-
ing the confederate soldiers who stood
about to watch me.

In another camp I was squatting on
the ground, mechanically showing my
soaps and tobaccos, and playing deaf
to the thousand and one questions art-
fully put to me, when I saw by a
soldier's eye that some test of my hear-
ing was to be made.

That moment I heard the click of a
pistol being brought to cock. The
weapon was discharged within three
inches of my ear.

I never had to hold myself together
more than then. I slowly turned my
head and looked inquiringly about at
the smoke of the discharge.

When I reached Gen. Johnston's main
camp about Jackson, I knew that crucial
tests would be made. I had by that
time gained nearly all the information I
wished for Gen. Grant, and my plans
were how to get back to the federal
lines.

I slept in a barn one night, remote
from any camp, where I could have at
least partial peace from the fear of sol-
diers watching to entrap me to my death.
It was marvelous that I was not stark
mad by that time. The next morning
as I was getting out of the barn I saw
several infantry soldiers out foraging.
My actions had roused their suspicions.

I wrote on my slate that I was a con-
federate peddler named Freeman, and
gave to Jackson to get new goods
for selling to the boys in gray.

"Oh, that won't do," said one of the
soldiers. "I bet he's another Yank
spy."

Then I learned from the conversation
of my captors that two of the spies sent
out from Grand Gulf at the time I was
had been caught and hanged two days
previously.

Try and imagine what my thoughts
were as the soldiers marched me across
a cotton field to the headquarters. In
my four years of warfare that was the
nearest I ever saw death before me. It
seemed perfectly hopeless to brave out
the ordeal I would have to undergo in
the enemy's lines without a pass in my
pocket and no one to vouch for me.

I was taken to Gen. Kirby Smith's
tent. The general had been informed
that I had been arrested without a pass,
and that I was suspected of being a spy
in the guise of a deaf and dumb peddler.

Gen. Smith said nothing.
Two or three officers in his tent went
and whispered to him. I knew they
were devising schemes to catch me if I
was a spy in disguise.

I pulled myself together and looked
absolutely about as if I had never seen
the interior of a tent in time of warfare.
I knew that I was thoroughly suspected
by all present.

One of the officers wrote me a message
on a bit of paper. While I was writing
an answer the man started and ejaculated:
"Look out!"

I wonder now that my hand did not
start involuntarily. The officers and
others were looking at it closely.

An officer came forward and said:
"This poor mule looks tired. It's a
shame to keep him here." Then turn-
ing to me he smilingly said, "Are you
hungry?"

It was a pretty ruse, but I simply
stared at his epaulets.

Then they tried to make me pale, and
it was a frightful test.

I was given a seat while Gen. Smith
turned to other business, apparently
forgetful of me. The other officers sat
near me and smoked and chatted. Pres-
ently they began talking about some
new orders that had been issued about
every federal spy immediately upon
conviction. They talked about how
two spies that had been hanged two
days previously, had acted as they
scurried in death, and how the officers
were looking for more spies to hang on
the same spot. My brain was in a
whirl. Everything swam before my
eyes, but I sat with my face turned up
to the military diagrams and the rules
of camp on the tent wall before me.

More whispering followed. I wrote
on my slate: "I am hungry and tired.
Why do you keep me here?"

A colonel wrote: "We think you
are deceiving us. If you are, it will be
death to you." He watched my face as
I read the lines.

I wrote in reply: "I have a very
hard time getting a living in this war.
I am with the confederates with all my
soul. Please may I go?"

In an hour I was taken to a shanty-
like affair and looked in. A young man
in federal uniform was lying on the
floor when I entered. He rose, and
looking at me, said, "My goodness gra-
cias, have they got you, too?"

I looked vacantly at him. I wrote
that I was mute.

Then the stranger laughed and said:
"Oh, it won't do you any good to keep
that trick up longer. We're going to
die together as Union spies, and why
not be resigned to it. I was caught
day before yesterday, and I've been
sentenced to be hanged. Now they'll
wait for you to go with me. Ha, ha,
we'll show the Reds how Yankee boys
can die game, won't we?"

It was a trying moment, and I did
want to open my heart and mouth to
such a jolly federal man, while my case
seemed pretty hopeless. I could not
tell what opinion the man at Gen.
Smith's headquarters had formed of my
actions.

I wrote on my slate that I was a
mute, and that it was useless to try to
communicate with me except by signs
or writing. But the stranger talked
right along, and tried to appeal to my
love for the Union cause. He would
suddenly fling a very natural question
at me.

Worn out and helpless as I was, I
dared not do even for a second that
night. I knew my companion was
feigning sleep also.

Along in the middle of the night when
I was purposely breathing deep and
regularly, I was all attention, but still
breathing deep. I heard a pistol drawn
from its holster. Crash, bang! The
weapon was fired an inch above my
face. It seemed as if lightning had
struck me.

At the same moment a dark lantern
was flashed in my face and my counte-
nance studied.

I slowly opened my eyes at the light
and rolled over as if to go to sleep.

The pseudo Union soldier went on
with his whispering about me and what
reason there was to suspect me as a spy.

At seven o'clock the next morning I
was led to the cook tent and given a
meal. My satchel was restored to me.
A colonel came and shook me by the
hand. He looked over my remaining
soaps, etc., and bought a little. Then,
turning to me he asked: "How much
are these?" I believe my lower jaw
drove me. I was caught off my guard
for a time. But I never spoke, and the
colonel was not looking at my face.

He wrote me a pass in the lines about
Jackson, and just as he handed it to me
he turned and said: "Let me see that
again." My hand almost moved to obey
such an agreeable gentleman, but in-
stantly I folded the paper and started
on my way out of camp knowing that I
was watched covertly by scores of eyes.

That day I replenished my satchel in
Jackson, and started back by a circuit-
ous road toward the federal lines. I
had no further bother from the confeder-
ates, and my gifts of tobacco to several
officers whom I met made me friends.

I reached the Grand Gulf at dawn on
May 11. I was thanked for the infor-
mation I had got for my army and a
month later I was first lieutenant in my
company.

Of the twenty men who went as spies
at that time four were captured and
three hanged.

I was in Nashville, Tenn., in 1888
and I called upon Col. James Parker,
who was on Gen. Smith's staff, and
who devised the attempts to catch me
and the game of bluff and counter-bluff.

He recalled the circumstances clearly,
and we became fast friends. He said
he was cock-sure when I started away
from Gen. Smith's headquarters that I
was a genuine deaf mute and he felt
sorry for me in my affliction.

THE GRANDAM.

Old, old, the life behind her lay
Like a long country full of light;
She gazed there with the inner eye,
For round her head was falling night,
But turned away her path to see
What lovely splendor crowned the height!

And as the fates once trod on wool,
All sounds came muffled to her ears,
Yet still her fancy heard the tone
Of bubbling fountains, of frolic fears,
Of tender whisp'ers in the dusk,
Of growth tender because of tears.

The gay sweet spirit in her felt
The joyous movement of the dance,
Her fainter faltering feet refused
The tripping measure. If perchance
She sang, alas! the sad old voice
Was like one singing in a trance.

So fresh, so strong in all her thought
That the cruel mirror spelled,
Or in the glass of young girls' eyes,
It seemed a phantom she beheld
Masked with gray shadows of gray lines,
Enchanted in a shape of old.

And knowing then the soul in her
Swelled, ever swelled with life increase
And essence of immortal youth;
So she possessed that soul in peace,
And at the slow bright summer day
Smiling and waiting her release.

—Harper's Bazar.

RACING A PRAIRIE FIRE.

BY HERBERT MOONEY.

We were a very merry party as we
bunched into the train at Omaha to con-
tinue our journey to California. In the
days already spent on the road from
New York each one had time to make
his neighbor's acquaintance, and know
as much about his affairs as if he had
known him for years.

At the period of which I am writing,
one going to San Francisco by train was
the hero of a thousand possible adven-
tures. In winter, the train might be
snowed up or disappear in a drift, a
hundred miles from any station, on the
bleak prairie.

Summer, again, had its own peculiar
dangers. We might be stopped and
overturned by a countless herd of buffa-
loes, or the Indians might take it into
their heads to tear up the rails. Besides
this, toward the end of a dry, hot sum-
mer, there was the chance of a prairie
fire. It is about this last that I am
going to write presently.

Away on either side, as far as the eye
could reach, the prairie rolled in billows
like the ocean—here a yellowish green,
and there varied with patches of scarlet
until it met the blue sky in the purple
of some far-off dreamy bluff. Now a
herd of antelope would start off, and go
bounding over the tall, rank grass fol-
lowed by the whip-like report of the
revolver, for the gentlemen on the rear
platform carried their "shooting-irons"
with them as a matter of course, and
were always ready for a snap-shot at
any passing game.

One lovely day when we were getting
on at what we thought a pretty fast rate
—twenty miles an hour—the engine
suddenly gave several sharp screams,
and the train began to slow up.

"Are we nearing a station?" asked
some one.

"No," replied a man with his head
out of the window; "but look yonder."
We did look and saw a black cloud
breaking across the track ahead and ex-
tending as far as the eye could see, in
one rushing, mighty, irresistible tor-
rent. It was a herd of buffalo on the
stampede, and as they went thundering
along, the sound of their hoofs was like
the booming of artillery.

Until they passed there was no going
ahead for us. Though the engine might
drive into the herd and pitch a dozen of
them off the line with the cow-catcher,
it would soon be brought to a standstill
by sheer dead weight.

Fortunately it was not a "big herd,"
so the train men informed us—there
are no herds now, large or small, thanks
to wanton slaughter—and so we were soon
on our way again, the irrepressible ones
as usual emptying their revolvers use-
lessly at the flying animals.

Shortly after the buffaloes had disap-
peared, there was eager talking and
anxious consultation with the conduc-
tor, for some of the old hands declared
that the prairie was on fire; they could
smell it.

But it was not until the shadows of
evening had gathered about us that it
became distinctly visible—a thin red-and-
yellow line, with flashes shooting high
into the sombre clouds on the northern
horizon.

"Yes, gentlemen," said the conduc-
tor, "it's rushing along miles ahead of
us, and may be it will cross the track
before we get through."

We were racing along merrily now,
but all the northern sky had become one
immense pyrotechnic display, and a
hissing, crackling noise came down the
wind with the columns of smoke.

Antelope, deer, coyotes, jack-rabbits,
prairie hens, and, in short, all sorts of
animals and game native to the country,
came scudding along in wild confusion
and terror, and crossed the track to the
southward, some being caught up by
the cow-catcher, and tossed back a
mangled heap by the side of the track.

It was getting insufferably warm and
stifling. The windows were all closed
for fear of the sparks and the portable
fire extinguishers were got ready. Day-
light was quite gone by this time, but
the whole north was lighted up by a
blood-red glare, flashing into sheets of
vivid yellow. The angry hall of sparks
flamed against the glass, and glowed
threateningly upon the roof, while here
and there little gray clouds of smoke
could be seen twirling up in thin, spiral
columns through the interstices of the
doors and windows.

On side, the roar of flames, the cries
of wild animals; inside the sobbing of
frightened women and children, and the
choir cough of some weak-chested
individual.

The train was dashed along at a fur-
ious rate, rocking from side to side like
a mad thing and the conductor re-
marked, in his hurried passing, that the
paint-work had caught fire.

The glass in the windows had grown
hot to the touch. We were rushing
through a sea of flame. The crying and
coughing of the women and children
became heart-rending, while the men
stood around in anxious groups, peer-
ing into the yellow, lurid light.

Suddenly we were plunged into pro-
found darkness. It gradually cleared
away, but we were terrified at first by
the strange grinding and jolting of the
train. Had we run off the rails, and
were we to be left a burning wreck in
the middle of this awful scene?

The suspense was great, but only
lasted for a minute. The train came to
an abrupt halt. The door opened with
a bang, and the voice of the conductor
was heard above the din, saying—
"Jump out lively, ladies! She's on
fire outside. Bring along your blank-
ets and rugs."

We needed no second invitation for
this, and presently were standing out-
side, beating at the light flames which
ran over the cars like will-o'-the-wisps,
for the paint-work was indeed on fire,
and blistered, blackened and scorched
in a thousand places.

In a few more minutes our blankets
would have been of no avail. As it was
our handsome train was a sadly disfig-
ured object. We opened the windows to
let in the fresh air, and bring out the
fainting women. All about us, and to
the northward, the ground was one black,
arid waste, marked here and there by
the half-burnt carcasses of some unfor-
tunate animal, whose flight was ineffectual.
Southward we saw an ever-revolving
black cloud, broken at intervals by a

spark or flash of flame; but the lurid-
ness and glare were now concealed from
our view by a black pall of smoke, as
was the pillar of light from the Egypt-
ians.

We thought we had escaped a terrible
danger, and were loud in our congratu-
lation; but the conductor only shook his
head good-humoredly, and seemed
rather disposed to make light of it. He
had been through a prairie fire before,
but admitted that it was not quite so
close a shave as this.

"The fire must have had a frontage
of twenty miles," he said, "taking it
from first to last, for we were thirty
minutes getting clear of it, and I am
certain the speed was worked up to
fifty miles at hour."

We could but admire the conductor's
courage and coolness in a moment of
such dreadful peril to every soul on
board of the train; and we told him so
with a heartiness and unanimity that
appeared to please him mightily, though
he modestly disclaimed all merit for
simply doing, as he said, what was his
duty.

An hour after our "great scare," the
charred and blackened train was again
rushing forward into the darkness, with
a hundred restless brains becalmed in
sleep, and naught between them and
the danger of the night save the mercy
of heaven and the watchful eye of the
engineer.

THE BABY.

Like a tiny glint of light piercing through the
dusky gloom
Comes but a little laughing face through the
shadows of my room.

And my pen forgets its way as it hears her pat-
ting tread
While her prattling treble tones chase the
thoughts from out my head.

She is queen and I her slave, one who loves her
and obeys,
For she rules her world of home with imperi-
ous baby ways.

In she dances, calls me "Dear!" turns the
pages of my books;
Throws herself upon my knee, takes my pen
with laughing looks.

Makes disorder reign supreme, turns my papers
upside down,
Draws me cabalistic signs, safe from fear of
any town.

Crumples all my verses up, pleased to hear the
crackling sound,
Makes them into balls and then—flings them all
upon the ground.

Suddenly she flits away, leaving me alone
again
With a wealth about my heart, and a brighter,
clearer brain.

And although the thoughts return that her com-
ing drove away,
The remembrance of her laugh lingers with me
through the day.

And it changes, as I write, I may take a crum-
pled sheet,
On the which, God knoweth why! read my fan-
cies twice as sweet.

—Victor Hugo.

He Didn't Drop.

His name was Moses Sparrow. He was
very green. That was the idea
that always came into Miss Page's mind
when she looked at that country land-
lady's son. Such a rustic young man,
with such fair hair, such big blue eyes,
such sloping shoulders, such a lamb-like
expression. And being there at the farm-
house, where she had been sent to
spend the summer months, the city
belle resolved that she would try her
power of fascination upon the boy,
who struck her as so good a subject for
flirtation, in which all the fun was to
be on her side and all the sentiment on
his.

And at it she went, beginning with a
smile, a word, and rejoicing to see the
fish bite so readily. She enjoyed her
self very much until she grew tired of
it, and then she decided on breaking the
heart she had won, and enjoying the
crash. So she turned him out in the
garden, and made him sit beside her on
the bench under the wisterias, and said
sally—

"I'm going home next week. I shall
send you wedding cards when I'm mar-
ried. I'm to be married to a rich old
gentleman next winter."

Then she waited to see him drop at
her feet. He only said—
"Well, I'm real glad. I kinder feel
afraid I'd been 'goin' too far with you.
I'm a sort of butterfly, flitin' from
flower to flower, you know; and I've
flirted with you, I do allow. I was
afraid you'd go off in a decline or suthin'
—you seemed to set so much on me—if
you heerd sudden-like that me and Ann
Maria was keepin' steady company. But
law, sence you're goin' to be married,
sence you ain't no harm done!"

Then he smiled at Miss Page, and she
arose and sailed away from him with
great dignity.

GEMS.

The drying up of a single tear has
more of home than shedding seas of



THE HORSE.

Care of Horses.

As the hot season approaches, too much stress cannot be laid on the importance of watering your horses often and always before feeding. Nothing is so refreshing to a fatigued horse as a drink of pure water, not excepting his feed. By far the largest proportion of the animal body is composed of water, and the system cannot be kept in a normal condition unless it is supplied very liberally with this fluid. This need of a liberal supply of pure water is no less great in disease than in health. Too often when a horse is a little "off his feed" his water supply is restricted adding to his misery. In any and every disease a horse will do better if allowed all the water he wants than if his supply is restricted. Do not mistake this statement. It does not mean that a horse should be allowed to drink a large quantity of water at any one time. He should be offered a small quantity every twenty or thirty minutes until he has all he wants. Then, if a pall of fresh water is kept constantly before him he will never take enough at one time to hurt.

In repose a horse should stand without pointing any of his feet. As soon as he begins to stand with one foot in advance of the opposite one he is unbalanced and sooner or later must go wrong. If cases of this kind are properly attended to at the first indications the trouble will soon be overcome; but if allowed to go on until the parts are diseased, the treatment becomes prolonged and less certain in its results. Ninety-nine out of every hundred cases of lameness in a horse are due to an unbalanced foot, the result of improper paring of the foot or a shoe not adapted to the foot or the work for which the horse is used.

While it is not possible to cure every case of lameness in a horse by shoeing, it is nevertheless true, that the proportion of curable cases is so large as to be considered almost universal. Horse owners and shoeing smiths are slow to believe that anything can be done by shoeing to improve a lame horse, if he is not lame in the foot. Nothing could be further from the truth than this belief, and it stands as a great stumbling stone to advancement in the art of shoeing horses. If every horseowner and every horse owner really believed the truth, that any portion of the foot influences the entire limb, then we would have better shoeing and fewer lame horses. Great suffering is caused by the improper use of the whip, the torturing check rein, the curb bit, neglect in watering and feeding, and yet I believe that bad shoeing alone results in more misery among horses than all these causes combined. The one is visible and when a case is seen, there is a chance of its being reported and prevented, but innumerable horses, many of which have kind masters, are quietly and patiently suffering great torture.

In our professional duty we are often called to see a lame horse and learn that he has just been to the shoeing smiths, who have had the shoes off and says that there is nothing the matter with his feet. Upon taking him to the smith and adjusting the shoe to relieve the pressure on some portion of the foot or limb, immediate improvement is shown. Ringbone, for instance, comes, as all horsemen know, in three different positions. The outside, inside or front. Take horses with outside ringbone and you will find a peculiarity in the shape of the foot in every case. Horses with the inside ringbone will have another peculiarity in the shape of the foot, and those with the same trouble in front have still another peculiarity. Horses with spavin will have another peculiarity in the shape of the foot not found in sound horses, and so we might go on enumerating pathological conditions in the feet and limbs of horses, entirely due to a mistaken idea among our horse owners. But enough of this subject for the present. — Dr. J. H. Herter, V. S., in Human Alliance.

The owner that does not know enough to keep his team in good condition for work is being paid for his neglect by the losses that come in work poorly done, and lessened value of teams. Some men will lay the blame on the collar, the horse, or the work, when another man with the same team and harness will do more of the same kind of work, and the team thrive to the end of the season without a scar or sore. One man is thoughtful, the other is negligent and careless.—Exchange.

Treat your horse well and he will treat you well. Give him a bed of German Peat Moss. C. B. Barrett, 45 Market street, Boston, Mass.

The Weather Bureau's Weekly Crop Bulletin.

FOR WEEK ENDING MONDAY JULY 18, 1898

OFFICE OF THE UNITED STATES WEATHER BUREAU, BOSTON, MASS., JULY 19, 1898.

The crops are much improved in Rhode Island, Connecticut and Massachusetts, though more rain is needed. The drought continues in the northern states, though, as yet, crops are not seriously injured. Frosts on the 11th and 13th did considerable damage to potatoes, corn, beans and vines in the lowlands of the northern states.

MAINE.

Androscoggin.—Drought continues. Grain rusting badly. Haying well along; large cut. Large range in temperature.

Aroostook.—Rain needed; frosts 11th, 12th damaged buckwheat, beans and potatoes in lowlands; haying in full progress, big crop; potatoes good, little damage by beetles.

Cumberland.—The drought is getting severe; potatoes, small fruits and grass fields need rain; crops have generally made a fine growth.

Franklin.—Frost on the 12th damaged corn and beans; corn and gardens retarded by cold nights; hay half cut; drought becoming severe.

Hancock.—In need of rain; vegetables doing well; fine weather for haying; fruit not troubled by worms as yet.

Kennebec.—Drought prevailing; in some sections vegetation is drying up; potatoes will be small and a short crop in many fields unless it rains soon; in vicinity of Mt. Vernon dry weather is little felt.

Knox.—All crops growing wonderfully; recent rain very beneficial; good hay crop.

Lincoln.—Crops doing well but are beginning to feel the drought; hay crop large; blueberries coming on but will be a short crop.

Oxford.—Rain much needed; corn leaves rolling; potatoes at a standstill; hay crop is nearly harvested, barns overflowing, most excellent quality of hay; late berries suffering for rain.

Penobscot.—Grain is heavy, looking well and growing rapidly; rain much needed, ground getting quite dry; pastures drying up, vegetation suffering; haying well advanced, large crop.

Piscataquis.—Showers during the week have done much good, though rain still needed; crops not looking quite so promising on account of much needed rain; farmers getting along well with haying.

Sagadahoc.—Fine for haying; very dry, all crops need rain.

Somerset.—Very dry; hay three-fourths harvested, quality inferior; potato beetles plentiful.

Waldo.—Early potatoes ripening at half growth; apples half of average crop; very dry.

Washington.—Potatoes and grain very promising; recent showers of great benefit.

York.—Frost 11th and 12th, but little damage; very dry; haying progressing finely.

NEW HAMPSHIRE.

Belknap.—Potatoes poor because of drought; grain generally good; haying under way.

Carroll.—Drought injuring crops generally; frost injured corn, potatoes and beans.

Cheshire.—Rain needed for potatoes, corn and pastures; apples falling, light crop expected.

Grafton.—Damage by frost in lowlands; rain much needed by all crops; good haying.

Hillsboro.—Too dry for rapid growth; frost did little damage; haying soon finished.

Merrimack.—Showers have improved crops, more is needed; apples will be a short crop.

Rockingham.—Hoed crops need rain; pastures still good; haying soon finished.

Strafford.—Good for haying but growing crops are in need of rain.

Sullivan.—Corn, potatoes and small fruit suffering for rain; spring grain saved in good condition.

VERMONT.

Addison.—Potatoes rusting badly in some sections; corn below average; haying being rushed.

Bennington.—Dry weather rolling corn and damaging potatoes; high pastures brown.

Caledonia.—Crops beginning to suffer for rain; frost 12th, damaged corn, potatoes and vines slightly.

Grand Isle.—Pastures getting short and stock water scarce; apples less than half crop, still falling.

Orleans.—Potatoes, corn and vines considered, in places, seriously damaged by frost on 12th; very dry.

Rutland.—All crops need rain, corn and potatoes suffering; unusually large crop of hay half secured.

Washington.—Frost of 12th damaged vegetables in places; general need of rain, though little damage yet.

Windham.—More rain needed though crops in fair condition; apples improved; good haying.

Windsor.—Crops in fair condition but beginning to need rain; large crop of fine quality hay.

The best grasses for such lands are

MASSACHUSETTS.

Barnstable.—Crops improved by rains; overflooded cranberry bogs good; apples poor; haying about done.

Berkshire.—Potatoes, corn and oats good; apples dropping; little damage by frost.

Bristol.—Showers have improved crops; prospects for about all crops good.

Dukes.—All vegetables were improved by rain.

Essex.—Crops good; haying three-fourths finished, very heavy crop; apples dropping.

Franklin.—Generally promising crops; potatoes and apples indicate a large yield.

Hampden.—More rain needed soon; haying soon finished; berries plenty; chestnuts bloom late.

Hampshire.—Garden truck, pastures, and early potatoes need rain; second crop grass short.

Middlesex.—Rain helped all crops; potatoes above average; apples plentiful in many orchards.

Nantucket.—All crops doing well; cabbage planted.

Norfolk.—Rains have improved crops and grass.

Plymouth.—Cranberries damaged by dry weather; apple crop light.

Suffolk.—Lawns and plants much improved by the recent rains.

Worcester.—More rain needed; cherries light; blueberries averages crop; good crop of hay.

RHODE ISLAND.

Bristol.—Rain has helped corn, potatoes, and crops generally; hay secured in excellent condition.

Kent.—Corn and potatoes in good condition; oats light; rye average; apples light and falling.

Newport.—Heavy rain of 13th has improved crops and conditions general, prospects promising.

Providence.—Rain has improved crops wonderfully, cranberries just in bloom, a week or ten days late.

Washington.—Rain very beneficial and crops generally looking well.

CONNECTICUT.

Fairfield.—Corn, potatoes, and tobacco growing finely; small fruits and vegetables plentiful.

Hartford.—Crops doing well but more rain needed.

Litchfield.—Rain has improved all vegetation.

Middlesex.—Early crops suffered badly, late crops good condition, present prospects good.

New Haven.—Crops generally very promising, corn backward; apples light; peaches near average.

New London.—Corn doing well; rye being harvested; second crop of clover starting well.

Tolland.—Crops much improved; corn and potatoes doing finely; heavy crop about secured.

Windham.—Oats, rye and hay generally harvested, grain fair crop, hay heavy.

J. W. SMITH,

Section Director, Boston, Mass.

Reclaiming Marsh Lands.

Marsh lands vary greatly in their character, and, consequently, in the best methods of their treatment, says a report of the Wisconsin Experiment Station. In a general way it must be said all such lands, before they can become suitable for general agricultural purposes, must be drained, and sooner or later, the drainage is always to be recommended, rather than draining by open ditches. If the peat is well decomposed, and not more than eighteen inches thick, the best method of treatment is to drain at once, but if the peat is not well decomposed—that is, if it is coarse and fibrous, and brown in color, having a thickness of more than eighteen inches, then usually in such cases, open ditches should first be resorted to. The necessity for open ditches in such cases grows out of the fact that undecomposed peat when drained shrinks very greatly and settles so that the surface may fall ten to twenty inches during the process of drying. If the tiles are laid in such lands at once the danger is that they will be found too near the surface for effective work when the land has become dried. After such land has laid two or three years and the peat has settled, then the open ditches may be deepened and the field properly tiled.

For black marsh soils tile draining is the only suitable way to bring them under good agricultural conditions. Wherever possible the tile in these lands should be laid not less than two and a half to three feet, and the lines of tile should usually be no further apart than 75 to 100 feet, three-inch tile being used for the laterals and a larger size for the main drains, the size of the mains varying with the number of laterals and amount of ground drained. If the lands are very flat so as to require careful leveling in order that the drains may be properly laid, it will be found best in the end to put such work under the supervision of a man who understands thorough tile draining, for otherwise a considerable expense might be incurred, resulting in an unsatisfactory piece of work.

The best grasses for such lands are

red-top and timothy, both doing well where the ground is properly drained. On the black marsh soils, too, corn and oats thrive, but there are usually found in many of these lands spots where corn fails to develop, or where it may start out well but soon become yellow and die. On such spots farmyard manure usually exercises a very beneficial effect, but just what is the cause of this dying out of corn, or failure to develop, is yet an unsettled problem. It should be said that these marsh lands, when they are once thoroughly drained, become the most valuable and productive lands we have, and where is not too thick a layer of undecomposed peat there is usually but little risk to run in improving such lands where these are so situated as to be easily underdrained.

AGRICULTURAL FAIRS FOR 1898.

We shall be glad to receive information from friends of the following list of holding fairs not included in the following list

MASSACHUSETTS.

Amesbury and Salisbury, Amesbury, Sept. 27, 29

Brookline, Brookline, Sept. 28, 29

Barnstable, Barnstable, Sept. 19, 20

Berkshire, Pittsfield, Sept. 13, 15

Blackstone Valley, Uxbridge, Sept. 27, 28

Bristol, Taunton, Sept. 20, 22

Buxton, Buxton, Sept. 15, 16

Essex, Peabody, Sept. 20, 22

Franklin, Greenfield, Sept. 23, 25

Hampden, East Palmer, Sept. 20, 21

Hampshire, Amesbury, Sept. 15, 16

Hampshire and Franklin, Northampton, Oct. 5, 6

Hillside, Middlebury, Sept. 7, 8

Hillside, Cummington, Sept. 27, 28

Hingham, Hingham, Sept. 27, 28

Hosack, North Adams, Sept. 21, 22

Housatonic, Great Barrington, Sept. 25, 30

Manufacturers' Agricultural, North Attleboro, Aug. 30, 31

Marblehead, Marblehead, Sept. 24, 25

Martha's Vineyard, Martha's Vineyard, Sept. 20, 21

Middlesex North, Framingham, Sept. 13, 15

Middlesex South, Framingham, Sept. 13, 15

Nantucket, Nantucket, Aug. 31, Sept. 1

Oxford, Oxford, Sept. 1, 2

Plymouth, Bridgewater, Sept. 14, 16

Spencer, Spencer, Sept. 23, 25

Weymouth, Weymouth, Sept. 29, Oct. 1

Worcester, Worcester, Sept. 6, 8

Worcester East, Clinton, Sept. 15, 16

Worcester North, Clinton, Sept. 15, 16

Worcester South, Sturbridge, Sept. 15, 16

Worcester West, Barre, Sept. 20, 30

MAINE.

Androscoggin, Livermore Falls, Aug. 30, Sept. 1

Androscoggin Valley, Canton, Sept. 27, 29

Bridgton Farmers' Club, Bridgton, Sept. 27, 29

Buxton, Buxton, Sept. 15, 16

Cumberland, Gorham, Sept. 20, 22

Cumberland Farmers' Club, W. Cumberland, Sept. 27, 28

Central Washington, Machin, Sept. 20, 21

Durham, Agricultural, Durham, Sept. 21, 22

Eastern Maine Fair Association, Bangor, Aug. 29, Sept. 2

Eden Agricultural, Sebago, Sept. 21, 22

East Edgemoor, East Edgemoor, Sept. 21, 22

East Piscataquis, Milo, Sept. 22, 24

East Somerset, Hartland, Sept. 22, 24

Franklin, Farmington, Sept. 20, 22

Gray Park Association, Gray Park, Aug. 30, Sept. 1

Hancock County Agricultural, Bluehill, Sept. 20, 22

Hancock County Fair Association, Ellsworth, Sept. 13, 15

Kennebec County, Readfield, Sept. 13, 15

Lincoln County, Danville, Sept. 20, 21

Lee Union, Lee, Sept. 20, 21

Maine State Agricultural, Lewiston, Sept. 5, 9

Maine State Pomological, North Portland, Sept. 13, 15

Northern Cumberland, South Portland, Sept. 13, 15

New Gloucester, Danville, Sept. 20, 22

North Franklin, Phillips, Sept. 13, 15

Northern Hancock, Amherst, Sept. 20, 22

North Knox, Union, Sept. 20, 22

Northern Oxford, Andover, Sept. 21, 22

North Penobscot, North Penobscot, Sept. 21, 22

New Portland Agricultural, N. New Portland, Sept. 21, 22

North Waldo, Unity, Sept. 21, 22

North Washington, Princeton, Sept. 6, 8

North Berwick, North Berwick, Aug. 23, 25

Oxford, Norway, Sept. 20, 22

Orrington Agricultural, Orrington, Aug. 30, Sept. 1

Ossipee Valley Union, Cornish, Aug. 30, Sept. 1

Pittston Agri. and Frotting Park Association, East Pittston, Sept. 13, 15

Penobscot, Bangor, Sept. 27, 28

Riverside Park Assoc., Bethel, Sept. 13, 15

Richmond Farmers' Club, Richmond, Sept. 27, 28

Ramoth Park, W. Newfield, Sept. 27, 28

Southern Aroostook, Sherman Mills, Sept. 27, 28

South Kennebec, South Kennebec, Oct. 11, 13

Sagadahoc, Topsham, Sept. 11, 13

Somerset, Madison Bridge, Sept. 5, 6

Somerset Central, Charlestown, Sept. 5, 6

Springvale A. and M. Association, Springvale, Sept. 5, 7

Sanford Trotting and Fair Association, Sanford, Sept. 27, 29

West Oxford, Fryeburg, Sept. 27, 29

West Penobscot, Exeter, Sept. 27, 29

West Piscataquis, West Piscataquis, Sept. 27, 29

Waldo County, Waldo, Sept. 13, 15

Washington County, Pembroke, Sept. 14, 15

West Washington, Cherryfield, Sept. 14, 15

York County, Saco, Sept. 30, Sept. 2

Bradford & Newbury, Bradford, Sept. 27, 29

Rochester, Rochester, Sept. 13, 16

VERMONT.

Champlain Valley, Burlington, Sept. 6, 8

Rutland, Rutland, Sept. 13, 15

Rye and Wells, South Rye, Sept. 21, 23

Springfield, Springfield, Sept. 13, 14

Valley Fair, Brattleboro, Sept. 28, 29

Walla Walla Valley, East Cor. Walla Walla, Sept. 31, Sept. 2

Winchell, Winchell, Sept. 28, 30

Winchell Valley, Waterbury, Sept. 13, 15

CONNECTICUT.

Gulford, Gulford, Sept. 28, 29

New London, New London, Sept. 5, 7

Newtown, Newtown, Sept. 27, 29

Union, Enfield, Sept. 20, 22

Union, Union, Sept. 21, 22

Windham, Brooklyn, Sept. 13, 15

Berlin, Berlin, Sept. 21, 22

Brantford, Brantford, Sept. 28, 29

Chester, Chester, Sept. 28, 29

Danbury, Danbury, Oct. 3, 5

East Granby, East Granby, Oct. 3, 5

Granby, Granby, Oct. 3, 5